Usability and Accessibility Web Guidelines

QUEST 2013 Workshop April 11, 2013

U.S. Census Bureau
Center for Survey Measurement
Human Factors & Usability Research Group



Roadmap

- Use Color Wisely
- Use Text Wisely
- Use Plain Language
- Make it Section 508 Compliant
- Optimize for Mobile Devices





Use Color Wisely

DO use high contrast.

Black on white

White on black

Remember

Color-Blindness





Use Color Wisely

- Color can elicit an emotional reaction¹
- Blue is the most preferred color

 A Yellowish-green hue is the leastpreferred color

¹Palmer, S. E. & Schloss, K. B. (2010). An Ecological Valence Theory of Human Color Preference. *Proceedings of the National Academy of Sciences (USA), 107* (19): 8877-8882. Available at 10.1073/pnas.0906172107



Use Text Wisely

Don't

use red text for normal content.





WRITE IN ALL CAPS!!!!!!!!!!!!





Use Plain Language

- Write it in simple English
- "If you can't explain it simply, you don't understand it well enough."
 - Albert Einstein
- Avoid Jargon & undefined acronyms
- Structure text and content simply





Make it 508 Compliant

- 508 Compliance benefits everyone
- Tag pictures meaningfully
- Use intuitive navigation
- Make the "happy path" as short as possible.





Optimize for Mobile Devices

- Avoid Scrolling, especially horizontally
- Keep varying screen sizes in mind
 - Use up-to date programming language
 - Make sure it looks like you want it to
- Use large enough targets for small screens
- Test the interface on the most popular models of phones and tablets



Summary

- Make it easy to see, easy to read, accessible for everyone, and usable on mobile devices
- We are open to input and references share your findings with us.
- Guidelines will be published.
 - Intended to save time and government money.



Thank You!

- Kathleen.t.ashenfelter@census.gov
- 301-763-4922

Thanks to the Human Factors and Usability Research Group:

- Temika Holland
- Rebecca Keegan
- Sabin Lakhe
- Larry Malakhoff
- Beth Nichols
- Kirk Norman
- Erica Olmsted-Hawala
- Victor Quach





References

- Text
 - W3C Web, Accessibility Guidelines
- Color
 - Palmer, S. E. & Schloss, K. B. (2010). An Ecological Valence Theory of Human Color Preference. Proceedings of the National Academy of Sciences (USA), 107 (19): 8877-8882. Available at 10.1073/pnas.0906172107 (Emotions, blue most preferred color.)
 - Schloss, K. B. & Palmer, S. E. (2009). An ecological valence theory of human color preferences. Journal of Vision, 9 (8).





References

- Plain Language
 - Dale, E. & Chall, J.S. (1948). A formula for predicting readability: Instructions.
 Educational Research Bulletin, 27, 2, 37-54.
 (Dale List of 3,000 familiar words).
 - U.S. Dept. of Health and Human Services (2006). The Research-Based Web Design & Usability Guidelines, Enlarged/Expanded edition. Washington: U.S. Government Printing Office, 2006. (Avoid jargon, Avoid scrolling).



References

- 508 Accessibility
 - Kirkpatrick, C.H. (2003). Two for the price of one:
 Accessibility and usability. Computers in
 Libraries, Jan. 2003, 26-29. (Easier for everyone).
 - W3C Accessibility Guidelines
- Mobile Devices
 - Park, W., Han, S.H., Kang, S., Park, Y.S., & Chun, J. (2011). A factor combination approach to developing style guidelines for mobile phone user interface. International Journal of Industrial Ergonomics, 41, 536-545.